

APPROVED FOR RELEASE: 2007/02/08: CIA-RDP82-00850R000100010020-7

11 JANUARY 1979

(FOUO 2/79)

1 OF 1

FOR OFFICIAL USE ONLY

JPRS L/8213

11 January 1979

TRANSLATIONS ON USSR MILITARY AFFAIRS
(FOUO 2/79)

U S S R

U. S. JOINT PUBLICATIONS RESEARCH SERVICE

FOR OFFICIAL USE ONLY

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

BIBLIOGRAPHIC DATA SHEET		1. Report No. JPRS L/8213	2.	3. Recipient's Accession No.	
4. Title and Subtitle TRANSLATIONS ON USSR MILITARY AFFAIRS, (FOUO 2/79)				5. Report Date 11 January 1979	
7. Author(s)				6.	
9. Performing Organization Name and Address Joint Publications Research Service 1000 North Glebe Road Arlington, Virginia 22201				8. Performing Organization Rept. No.	
12. Sponsoring Organization Name and Address As above				10. Project/Task/Work Unit No.	
				11. Contract/Grant No.	
13. Type of Report & Period Covered				14.	
15. Supplementary Notes					
16. Abstracts The report contains information on the Soviet military and civil defense establishments, leadership, doctrine, policy, planning, political affairs, organization, and equipment.					
17. Key Words and Document Analysis. 17a. Descriptors USSR Military Organizations Military Facilities Military Personnel					
17b. Identifiers/Open-Ended Terms					
17c. COSATI Field/Group 15C					
18. Availability Statement FOR OFFICIAL USE ONLY. Limited Number of Copies Available From JPRS				19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 35
				20. Security Class (This Page) UNCLASSIFIED	22. Price -

FORM NTIS-15 (REV. 1-72)

THIS FORM MAY BE REPRODUCED

USCOMW-DC 14852-P72

FOR OFFICIAL USE ONLY

JPRS L/8213

11 January 1979

TRANSLATIONS ON USSR MILITARY AFFAIRS

(FOUO 2/79)

CONTENTS	PAGE
History of Military Topographers Sketched (B. Ye. Byzov; GEODEZIYA I KARTOGRAFIYA, Jul 78)	1
Zhitomir Radioelectronic Air Defense School (Nikolay Yakovlevich Golovanov; ZHITOMIRSKOYE KRASNOZNAMENNNNOYE IMENI LENINSKOGO KOMSOMOLA, 1977)	8
Book Discusses Methodology of Military-Scientific Cognition (I. Ye. Shavrov, M. I. Galkin; METODOLOGIYA VOYENNO- NAUCHNOGO POZNANIYA, 1977)	12
Book Describes Army Operations in Great Patriotic War (A. I. Radziyevskiy; ARMEYSKIYE OPERATSII, 1977)	29

- a -

[III - USSR - 4 FOUO]

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

UDC: 623.71

HISTORY OF MILITARY TOPOGRAPHERS SKETCHED

Moscow GEODEZIYA I KARTOGRAFIYA in Russian No 7, Jul 1978 pp 1-6

[Article by B. Ye. Byzov: "Glorious Path of Military Topographers"]

[Text] This country's geodetic community extensively celebrated the 60th anniversary of the Soviet Army Military Topographic Service (MTS).

During the years which have passed since its establishment the MTS, successfully performing its tasks in the area of topographic-geodetic support of the USSR Armed Forces, has made an enormous contribution toward cartographic study of the territory of our homeland.

Lt Gen Tech Trps B. Ye. Byzov, Chief of MTS, discusses in this article the glorious road traveled by our military topographers.

The Military Topographic Service celebrated its 60th anniversary on 8 May 1978. Its formation and development are inseparably linked with the history of establishment of the Soviet Army, in the ranks of which the Military Topographic Service has traveled a great road and at all stages of which has honorably performed its assigned tasks, has made and is continuing to make a worthy contribution toward the cause of strengthening the defense capability of our homeland.

In the span of six decades generations of military geodesists, topographers and cartographers have come and gone. Each contributed its own glorious pages to the fighting and labor chronicle of the Military Topographic Service and to the cause of improving the thoroughness of topographic-geodetic coverage of our country's territory.

We offer warm greetings and congratulations to all veterans of the Military Topographic Service, who have made a great personal contribution to its development and topographic-geodetic support services for the military, all military personnel, workers and engineer-technician personnel who through their daily exemplary labor are doing their part toward increasing the combat readiness of the Soviet Army.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

The memory of those military geodesists, topographers and cartographers who gave their lives fighting for the freedom and independence of our homeland will remain forever in the hearts of our people. Their courage, steadfastness and unswerving will to carry out their military duty under any and all conditions constitute a vivid expression of their total dedication to the socialist homeland and the cause of the Communist Party.

The revolutionary fighting and labor traditions of the military topographers were born during the Civil War years. Under the extremely difficult conditions of that time, military topographers not only performed tasks pertaining to topographic support for Red Army combat operations but also frequently fought the enemies of the Soviet Republic with weapon in hand. A high degree of courage and valor was displayed by the personnel enrolled in the first Petrograd Military Topography Course in defending the cradle of the Revolution against the White Guardists and interventionists, as well as in putting down the counterrevolutionary mutiny at Kronstadt. We are proud of the fact that maps produced at that time by military topographers and cartographers were extensively utilized by the founder of the Communist Party and our state, V. I. Lenin, who directed the defense of the young Soviet Republic. Many maps and atlases produced by the Military Topographer Corps are preserved in the V. I. Lenin office and quarters museum in the Kremlin.

Up to the spring of 1919 the Military Topographic Service was the sole organization in the Soviet Republic performing topographic-geodetic and cartographic services. On 15 March 1919 V. I. Lenin signed a decree ordering establishment of the Higher Geodetic Administration (VGU, now the USSR Council of Ministers Main Administration of Geodesy and Cartography), which signaled the beginning of organization of a civilian topographic-geodetic and cartographic service in this country.

After the Civil War came to an end, during the years of peacetime construction and particularly during the first five-year plans, the Military Topographic Service underwent development and improvement together with all Soviet Army arms and services. Of great importance in its further development and mobilization of personnel for successful accomplishment of assigned tasks was the military topographers congress held in April 1924. In those years military geodesists and topographers performed important tasks connected with elevation measurement on the Trans-Siberian Mainline and linking the levels of the Baltic Sea and Pacific Ocean, as well as topographic surveys in border areas, in the site areas of the Kursk Magnetic Anomaly and the Dneproges construction project, and participated in high-mountain expeditions of the USSR Academy of Sciences and in establishing together with enterprises of the Main Administration of Geodesy and Cartography an astro-geodetic network over a considerable portion of the territory of the USSR.

Considerable work was performed to improve the equipment and organizational structure of MTS units; motorized topographic detachments, geodetic units

FOR OFFICIAL USE ONLY

and a scientific research institute were established. Training of officer cadres was improved. In 1925, at the initiative of the Military Topographic Administration and the Main Administration of Geodesy and Cartography, an official periodical was established for Soviet geodesists and topographers -- the journal GEODEZIST, the finest traditions of which are being continued today by the journal GEODEZIYA I KARTOGRAFIYA. From 1924 through 1932 military engineer-geodesists received training at the Moscow Institute of Geodesy, Photographic Aerial Survey and Cartography Engineers, and beginning in 1932 -- at the Military Engineering Academy imeni V. V. Kuybyshev.

By 1941 the Military Topographic Service together with the Main Administration of Geodesy and Cartography had accomplished the important work of producing topographic maps of the border areas of the USSR. They were unable, however, to complete large-scale surveys covering the entire country, and it was necessary to produce maps of a number of areas during the harsh years of the Great Patriotic War.

The Great Patriotic War was the greatest test for the Soviet state and its Armed Forces and for the entire Soviet people. The road to victory was trying and difficult. In battles of unprecedented scale and intensity against the aggressive bloc of fascist states, our people and their fighting men, under the direction of the Communist Party, gained a world-historic victory.

The Military Topographic Service, which provided topographic-geodetic data and cartographic materials in support of Soviet Army combat operations, also passed with flying colors the severe test of the war, particularly in the initial period. During the years of the Great Patriotic War MTS units, jointly with the enterprises of the Main Administration of Geodesy and Cartography, surveyed and ground-reconnoitered an area in excess of 5 million square kilometers, produced tens of thousands of original topographic and special maps, and printed approximately 900 million copies of maps for the military. Military geodesists and topographers, working jointly with the artillery topographic service, determined approximately 200,000 fundamental geodetic points. Working jointly with the Air Force aerial phototopographic service, more than half a million aerial photographs were photointerpreted. For purposes of troop control, the topographic services of the fronts prepared a large number of reconnaissance, relief and coded maps, river and lake maps, as well as many other special maps and graphic combat documents. Throughout the entire war MTS officers performed a great deal of work in the area of troop topographic training.

We have a great deal of respect for all military geodesists, topographers and cartographers, workers and employees, all those who bore on their shoulders the brunt of the labor involved in topographic-geodetic support of Soviet Army combat operations, those who by their selfless service to the party and our socialist homeland made a concrete contribution to the common cause of victory over the bitterest enemy of mankind -- German fascism. We should mention in particular the personnel of the topographic

FOR OFFICIAL USE ONLY

services of the fronts, which were headed by the most experienced officers and general officers of the MTS: A. M. Agalakov, A. N. Ardayev, S. P. Bogankov, V. A. Vasil'yev, I. G. Dorofeyev, L. L. Ivanov, I. I. Martynov, A. B. Migunov, M. S. Mondrus, S. S. Nikonenko, Yu. M. Orletskiy, A. M. Serdobintsev, V. G. Stepanov, F. Ya. Sokolov, V. Ya. Tereshchenko, K. N. Kharin, and others, as well as the personnel of the General Staff Military Topographic Administration, headed by Lt Gen Tech Trps M. K. Kudryavtsev.

The Communist Party and Soviet Government highly esteemed the military and labor accomplishments of the personnel of the Military Topographic Service during the Great Patriotic War -- 23 units were decorated, and thousands of officers, noncommissioned officers and enlisted personnel received decorations and medals.

The wealth of experience acquired by the Military Topographic Service in the Great Patriotic War is being extensively utilized in peacetime for further development and improvement of topographic-geodetic support services for the Soviet Army. On the basis of a critical analysis of this experience, the requisite practical conclusions have been drawn, directed toward prompt and uninterrupted supply of topographic-geodetic data and cartographic materials to the troops and staffs.

In the postwar years the Military Topographic Service has taken part in producing, jointly with the Main Administration of Geodesy and Cartography, a 1:100,000 scale map of the USSR and particularly its northeastern regions, and in projects to establish an astro-geodetic network for the Soviet Union, with the scientifically-substantiated layout and program of execution of which handled by eminent Soviet geodesist, Corresponding Member of the Academy of Sciences USSR Professor F. N. Krasovskiy. This network, unique in scale and accuracy, serves as a fine foundation for the conduct of all subsequent topographic-geodetic and cartographic work and for solving basic scientific problems of geodesy.

Geodesists and topographers are called pioneers, and this is clearly justified. Performing tasks assigned by the homeland, they are among the first to reach the cloud-towering heights, to cross the taiga and the burning sands of the deserts. And it is not surprising that many geographic features have been named in honor of geodesists and topographers. In 1952 a large team of military topographers was awarded the USSR State Prize for producing topographic maps of high-mountain areas in the Pamirs. They include V. M. Vasilevskiy, N. Ya. Gamaleyev, A. I. Kozlovskiy, Ye. N. Kanonov, V. G. Kustov, A. I. Makarov, A. K. Makarov, A. P. Makovskiy, A. S. Mel'nikov, D. F. Svetovidov, A. I. Simenyuk, and V. M. Grushnikov. In 1947 the scientific council of the USSR Geographic Society awarded military topographers N. Ya. Gamaleyev, A. K. Koshkarov and P. N. Rapasov the P. P. Semenov Grand Gold Medal for discovery, survey and determination of the height of Victory Peak.

A major contribution toward solving many practical and theoretical problems during this period was made by officers and general officers M. K. Kudryavtsev,

FOR OFFICIAL USE ONLY

A. S. Nikolayev, I. A. Kutuzov, F. Ya. Gerasimov, Yu. V. Sergovskiy, V. G. Stepanov, I. I. Mart'yanov, D. A. Popov, B. G. Afanas'yev, N. N. Mineyev, V. G. Dmitriyevskiy, M. R. Kurosh and others, as well as the following eminent scientists: Honored Scientists and Engineers G. V. Romanovskiy, A. N. Lobanov, A. V. Mazayev, Doctors of Technical Sciences N. A. Urmayev, N. P. Lavrov, P. A. Gaydayev, B. A. Litvinov, F. F. Lysenko, N. P. Makarov, V. P. Morozov, and many others.

In connection with the rapid advance of the scientific and technological revolution, furnishing of modern weapons and combat equipment to the army and navy, as well as qualitative changes in the composition of the Armed Forces, new and higher demands are being made on topographic-geodetic support of troops and combat readiness of the Military Topographic Service, and it is becoming necessary to revise and refine previous views and to find a different solution to many problems. The tasks of the Military Topographic Service have changed substantially and become more complex, and it now plays a greater role and has greater responsibility in matters of comprehensive and full support of troops and staffs with topographic-geodetic data and cartographic materials. Totally new kinds of geodetic, photogrammetric and cartographic equipment are being developed, and advanced methods and processes of performing special jobs are being developed and adopted. A significant contribution toward this has been made by State Prize winners B. G. Afanas'yev, V. I. Korablev, N. N. Mineyev, I. Ya. Pleshakov, A. A. Khoman'ko, G. A. Ustinov, the officers and general officers of the Military Topographic Administration and Military Engineering Academy imeni V. V. Kuybyshev, chiefs of the topographic services, commanders and officers of topographic units.

Modes of troop support are tested and improved, possibilities of shortening the time required to obtain and process topographic-geodetic data are sought, and training of MTS units for operation in a complex situation is improved in the course of command-staff, tactical special tactical exercises.

The Military Topographic Service today possesses everything requisite for successfully accomplishing its assigned missions. MTS units and establishments contain well-trained cadres who are dedicated to the Communist Party and socialist homeland. More than 90% of officer personnel are Communists and Komsomol members, while more than 60% possess higher military and specialized education. A major contribution toward training cadre officers of the Military Topographic Service is being made by the Leningrad Higher Military Topographic Command School and the Military Engineering Academy imeni V. V. Kuybyshev. Graduates of the Moscow and Novosibirsk Geodesy, Aerial Photographic Survey and Cartography Engineer institutes are doing a fine job in MTS units and at MTS enterprises.

The Military Topographic Service is accomplishing many practical and scientific tasks pertaining to establishing and updating geodetic networks, producing topographic maps, developing new instruments and modern processes in close contact with the Main Administration of Geodesy and Cartography and its scientific research and production subdivisions.

FOR OFFICIAL USE ONLY

Implementing the resolutions of the 25th CPSU Congress, the personnel of the Military Topographic Service are working very hard and with a high degree of responsibility in 1978. A special role in accomplishing all tasks is played by party-political work and the efforts of party, Komsomol and trade union organizations in mobilizing the personnel of MTS units for successful, high-quality and efficient accomplishment of the combat and political training program, special projects, and indoctrination of personnel in a spirit of deep ideological conviction, Soviet patriotism and proletarian internationalism, as well as constant readiness to defend the interests of our socialist homeland.

Military topographers are celebrating their 60th anniversary with new successes in combat training and in accomplishing assigned tasks and socialist pledges.

The high praise for the military labor of the defenders of the homeland contained in the CPSU Central Committee message of greetings in connection with the 60th anniversary of the USSR Armed Forces and in speeches by Leonid Il'ich Brezhnev during his trip to Siberia and the Far East and at the 18th Komsomol Congress have generated a new upsurge in political and labor activity by military personnel, civilian workers and employees of MTS units. For a number of years now 16 enterprises have maintained their title of Communist labor collectives, while 5 units have been awarded the title of Excellent Labor Organization and Production Enterprise. Worthy examples of a Communist attitude toward labor are shown by senior technician-cartographers A. I. Bogatova, who had met her own personal five-year plan target by the 60th anniversary of the USSR Armed Forces, Ye. I. Ushenina, V. A. Shapovalova, S. A. Struchalin and many others, who have completed four annual targets each. Excellent, stable performance in training and labor has been shown by the units under the command of N. N. Voronkov, G. F. Shapovalov, E. K. Shurpitskiy, B. S. Gavrilov, G. L. Lyakhin, A. G. Pavlovskiy, and others.

In connection with the 60th anniversary of the USSR Armed Forces, a large number of Military Topographic Service officers and warrant officers have been awarded decorations and medals. One of the best MTS units was awarded the Order of the Red Banner of Labor. These decorations attest to recognition of the contribution made by the personnel of the Military Topographic Service toward increasing the combat readiness of this country's Armed Forces. At the same time they oblige us to work even better, tirelessly improving the quality and efficiency of all our work, not resting on our laurels but concentrating attention on new tasks and unresolved problems. "Strengthening and improvement of the army and navy," states USSR Minister of Defense Mar SU D. F. Ustinov, member of the CPSU Central Committee Politburo, "is a complex, all-encompassing, innovative process, in which there can be no place for stagnation. That which was new yesterday today becomes a routine achievement. Herein lies the essence of the dialectic of military affairs."

FOR OFFICIAL USE ONLY

The Communist Party and Soviet Government are doing everything necessary to preserve peace and the security of peoples. The entire world is aware of the beneficent influence of the peace-seeking foreign policy of the Leninist party and the vigorous activities toward this end by CPSU Central Committee General Secretary Comrade L. I. Brezhnev, Chairman of the Presidium of the USSR Supreme Soviet. There still exist in the world, however, forces of reaction and aggression, forces which are vigorously in operation, opposing détente and disarmament. These forces are maintaining focal points of tension, are inciting military conflicts, and are escalating the arms race. Under these conditions the CPSU Central Committee and Soviet Government are devoting constant attention toward strengthening this country's defense capability and a level of Armed Forces combat readiness guaranteeing an immediate rebuff to any aggressor. It is the duty of military topographers promptly and fully to provide the troops with topographic-geodetic data and cartographic materials, to work persistently to improve the means and methods of accomplishing the tasks assigned the Military Topographic Service at the present stage, and to improve organization and discipline.

For 60 years the Military Topographic Service has honorably carried out its duty to the homeland, successfully accomplishing its assigned tasks. Military topographers, indoctrinated in a spirit of total dedication to the Communist Party and the Soviet homeland, are making and will continue to make a worthy contribution to the cause of increasing the combat might of the USSR Armed Forces and strengthening the defense capability of our socialist state.

COPYRIGHT: Izdatel'stvo "Nedra", "Geodeziya i kartografiya", 1978

3024

CSO: 8144/0495

FOR OFFICIAL USE ONLY

ZHITOMIR RADIOELECTRONIC AIR DEFENSE SCHOOL

Moscow ZHITOMIRSKOYE KRASNOZNAMENNOYE IMENI LENINSKOGO KOMSOMOLA
in Russian 1977 signed to press 1 Apr 77 pp 1-4, 230-232

[Annotation, table of contents, author's introduction, and conclusion
of book by Nikolay Yakovlevich Golovanov]

[Excerpts] Title Page:

Title: ZHITOMIRSKOYE KRASNOZNAMENNOYE IMENI LENINSKOGO
KOMSOMOLA (the Zhitomir Red Banner [Radioelectronic
Air Defense School] imeni Leninist Komsomol)
Publisher: Voenizdat
Place and year of publication: Moscow, 1977

Signed to Press Date: 1 April 1977

Number of Copies Published: 30,000

Number of Pages: 232

Annotation:

The book contains a discussion of the history of one of the country's
oldest military schools--the Zhitomir Higher Command Red Banner Air
Defense School imeni Leninist Komsomol, the graduates who have performed
glorious feats in defense of the motherland. The author places great
attention on illuminating the work of the teaching staff and of the
school's party and Komsomol organizations in the education and indoctrina-
tion of officer cadres.

The book is intended for a broad circle of readers, especially for youths
who dream of becoming officers in the National Air Defense Forces.

Table of Contents

Author's Introduction 3

FOR OFFICIAL USE ONLY

Chapter 1. Commanders-antiaircraft artillerymen	--
The Red Army awaits its commanders.....	5
Moscow-Petrograd-Sevastopol'	12
RKKA [Workers' and Peasants' Red Army] Antiaircraft Artillery School .	22
Volunteers	38
Sevastopol' Antiaircraft Artillery School.....	41
On the eve of war.....	47
Chapter 2. During the years of severe tests.....	--
In defense of Sevastopol'	53
Deep within the country. Petrovsk-Ufa	58
In the first battles	63
Defense of the capital	66
The cradle of the revolution is inviolable	70
Defenders of Odessa	72
The legendary 365th Battery	74
Defending railroad junctions	79
The battles at Voronezh	80
At Stalingrad	82
The commander of the "Young Guards"	85
The experience of war--into the training process	91
The Battery imeni SUZA [Sevastopol' Antiaircraft Artillery School]	
at the front	105
Yassy	109
Liberation of the Baltic area	113
The school is awarded the Order of the Red Banner	118
On the Berlin axis	122
Chapter 3. Beneath peaceful skies.....	--
The first post-war years	128
Assimilation of new equipment.....	136
Military indoctrination.....	143
Ties to troop units	148
Chapter 4. True to traditions.....	--
Based upon a new configuration	152
Communists in the forefront	156
The cause which you serve	171
For quantity and mastery in sports	176
They serve in model fashion in troop units	179
Chapter 5. To new heights	
To the ranks of the highest	184
Imeni Leninist Komsomol	193
Ideological tempering	195
The school's 50th anniversary	201
The year of the Leninist jubilee	204
Created by the people--to defend reliably	210
They were the first	215
To new heights	220
Conclusion	230

FOR OFFICIAL USE ONLY

Author's Introduction

[Text] This book is the tale of the Zhitomir Higher Command Red Banner Radioelectronic Air Defense School imeni Leninist Komsomol and its glorious past which finds its roots in the years of the Civil War, of the school's activities during the struggle to build socialism in the USSR, of the historic deeds of its graduates during the years of severe tests, of the post-war development of one of the Soviet Army's oldest forges of officer cadres.

Archival documents, memoirs, and materials from school students over many years served as the basis for this book. The names of many previously unknown heroes and meritorious graduates of the school were discovered in the process and numerous documents and photographs were collected.

A Combat Glory Museum has been set up at the school. When he visited the school in 1970, MSU I. I. Yakubovskiy, USSR first deputy minister of defense, wrote the following in the visitor's register: ". . .the valuable materials collected in the school's Combat Glory Museum, construction of a memorial to the graduates who fell in battle for the motherland, and the earth soaked with the blood of the troops from the hero-cities that has been laid here with love, give witness to the fact that the school sacredly reveres the memory of the heroic deeds of its graduates."

Army Gen S. M. Shtemenko, who graduated from the school in 1930, wrote: "with great satisfaction, emotion, and joy several years ago I visited my old school where I began my military path almost 50 years ago. It was then called the Sevastopol' Antiaircraft Artillery School. Much water has flowed over the dam since that time: neither the equipment nor the people are the same, everything has changed just as our motherland has changed unrecognizably during these years. It is a joy and pleasure to recognize and see progress everywhere, including the growth and improvement of the school. It now trains first-class commanders with an engineer's education who know the complex equipment to perfection, equipment about which we were unable to even dream."

With no pretense of having fully depicted the glorious history and combat traditions of the school, the author strived to trace the more important events in the chronicles of its military affairs from its day of birth until the present.

The author expresses sincere appreciation to Maj Gen Arty Ye. Ye. Poluektov, chief of the school, Cols V. F. Burlachenko and F. V. Il'in, chiefs of the political section, Col M. M. Shashunov, former secretary of the school party committee, Engr-Col P. A. Zyukanov, and Col B. P. Nabokov, deputy chiefs of the school, N. M. Plitenchuk, to the veterans of the school, and to its graduates who provided assistance in the collection of materials linked with the activities of the Zhitomir Red Banner School.

FOR OFFICIAL USE ONLY

Conclusion

The Zhitomir Red Banner School has trained officer cadres for the Armed Forces for approximately 60 years. It has covered a glorious combat path during this time. From its walls came a large pleiade of military commanders who made a significant contribution to the development of military affairs, especially in the development and combat employment of antiaircraft artillery and of the SAM troops.

Thousands of the school's students continue to serve in troop units and many have become generals. And, regardless of where a graduate of the school serves, regardless of the post he occupies, he always with great warmth and sincerity recalls his old school, which provided him the credentials for the long and difficult military life, which indoctrinated in him love for the motherland and for the turbulent but honorable and interesting military profession.

From day to day, from year to year, the school's collective lives and labors. Coming in to replace the graduates are new youths who have dedicated their life to the difficult and responsible profession of officer.

Great and responsible missions face the school at the contemporary stage. These missions have been stipulated by the general policy of our Communist Party and the decisions of the 25th CPSU Congress.

Being continually concerned about improving the defensive capability of the Soviet state, the party is guided by the behests of the great Lenin. His words "any revolution is only worth something if it is able to defend itself" have become the true program of CPSU activities in the field of military organizational development.

And even if today our army possesses new more improved equipment than it did 50 plus years ago, even if the tactics for conducting battle have unrecognizably changed, the spirit of the glorious veterans, their patriotism, courage, and military ability, their unforgettable deeds and feats performed for the glory for the beloved motherland, for the glory of the Combat Banner of the units [chast'] where the school's students serve live eternally in the hearts of their young heirs--the students and officers of the Zhitomir Red Banner, who are prepared at any moment to come to the defense of the great conquests of October.

COPYRIGHT: Voenizdat, 1977

7869

CSO: 1801

FOR OFFICIAL USE ONLY

BOOK DISCUSSES METHODOLOGY OF MILITARY-SCIENTIFIC COGNITION

Moscow METODOLOGIYA VOYENNO-NAUCHNOGO POZNANIYA in Russian 1977 pp 1, 2, 429-432, 3-7, 8, 87, 128-129, 203-204, 310-311, 425-428

[Book edited by Army Gen I. Ye. Shavrov, Col M. I. Galkin]

[Excerpts] Title Page:

Title: METODOLOGIYA VOYENNO-NAUCHNOGO POZNANIYA (The Methodology of Military-Scientific Cognition)

Authors: Army General I. Ye. Shavrov, Colonel M. I. Galkin, et al.

Publisher: Voennoye izdatel'stvo Ministerstva Oborony SSSR

Place and year of publication: Moscow, 1977

Signed to Press Date: 19 May 1977

Number of Copies Published: 18,000

Number of Pages: 432

Information on Authors:

A group of authors of the General Staff Academy of the Armed Forces USSR imeni K. Ye. Voroshilov: Professor and Army General I. Ye. Shavrov; Honored Scientist of the RSFSR and Doctor of Military Sciences, Professor, Major General I. I. Anureyev; Doctor of Military Sciences, Professor, Major General N. I. Reut; Candidate of Philosophical Sciences, Docent, Colonel V. K. Abramov; Doctor of Military Sciences, Professor, Colonel I. N. Vorob'yev; Doctor of Philosophical Sciences, Professor, Colonel M. I. Galkin; Doctor of Philosophical Sciences, Docent, Colonel V. T. Login; Professor, Colonel V. I. Morozov; Candidate of Military Sciences, Senior Scientific Fellow, Colonel I. V. Rybolovski; Candidate of Philosophical Sciences, Docent, Colonel K. V. Spirov.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

Annotation

The book discloses special features in the employment of Marxist-Leninist methodology in military-scientific cognition which are determined by the specific nature of war and the conditions for its reflection in military knowledge. The central place in the book is occupied by an analysis of the characteristic features in the study of material and spiritual aspects of war, the logical functions of the laws and categories of dialectics in military-scientific cognition, the essence of military practice and its role in improving military theory, and other important questions. The book also contains recommendations to increase the effectiveness of military-scientific studies. A criticism of the methodological bases for bourgeois military concepts is provided.

The work is intended for officers, generals, and admirals of the Armed Forces and for all readers who are interested in the methodology of scientific cognition.

TABLE OF CONTENTS

	Page
Introduction	3
SECTION I. THE ESSENCE OF THE METHODOLOGY OF MILITARY-SCIENTIFIC COGNITION	
Chapter I. Marxism-Leninism--The Methodological Foundation of Military-Scientific Cognition	9
1. The concept of the methodology of military-scientific cognition	-
2. Objectivity and party spirit in military-scientific cognition	18
3. Marxist-Leninist philosophy--the theoretical basis for methods of military-scientific cognition	21
4. Criticism of the methodological bases of bourgeois military theory	30
Chapter II. The Content and Special Features of Military-Scientific Cognition	43
1. The essence and basic trends in military-scientific cognition	-
2. The special features of war as an object of cognition and conditions for its reflection in military-scientific knowledge	51
3. The level and basic features of the contemporary stage of military-scientific knowledge and their effect on the process of military-scientific cognition	58

FOR OFFICIAL USE ONLY

Chapter III. The Creative Nature of Military-Scientific Cognition	68
1. Methodological bases of military-scientific creativity	-
2. The creative nature of the military-scientific research process	74
3. The commander's creativity in a combat situation and ways of molding it	79
SECTION II. THE BASIC PROBLEM OF PHILOSOPHY AND MILITARY-SCIENTIFIC COGNITION	
Chapter IV. The Materialistic Approach to an Understanding of War and its Regular Laws	88
1. The struggle of materialism and idealism in the development of military thought	-
2. The materialistic approach to the study of war	101
Chapter V. The Dialectics of the Cognition of Material and Spiritual Factors in War	108
1. Material and spiritual factors in war and their relationship..	-
2. A materialistic approach to an understanding of the relationship between man and technology in war	112
3. The effect of material and spiritual factors of war on the forms and methods for the conduct of military operations	119
SECTION III. THE DIALECTICAL PATH OF MILITARY-SCIENTIFIC COGNITION	
Chapter VI. Military Practice and its Role in Military-Scientific Cognition	130
1. The content of military practice, its special features and basic types	-
2. The role of military practice in molding the thinking of command personnel and their combat skill	137
3. Military practice as a goal and the basis of military-scientific cognition and development of Soviet military science	142
Chapter VII. The Sensual and Logical Aspects of Military Scientific Cognition	154
1. Sensual cognition and its forms. Special features of sensual cognition in a combat situation	-
2. Logical cognition and its forms. The commander's thinking in a combat situation	161

FOR OFFICIAL USE ONLY

Chapter VIII. Truth in Military-Scientific Cognition	179
1. Objective truth of military-scientific knowledge--the most important condition for success in practical military activity	-
2. Special features of the relationship of the relative and the absolute in objectively true military knowledge.....	186
3. Military practice--the criterion of truth in military knowledge.	190
SECTION IV. THE METHODOLOGICAL FUNCTION OF DIALECTICS IN MILITARY-SCIENTIFIC COGNITION	
Chapter IX. Dialectics as Logic and the Theory of Military-Scientific Cognition	205
1. The unity of dialectics, logic, and the theory of cognition and its manifestation in military-scientific cognition	-
2. The comprehensiveness of examination of military processes	212
3. Cognition of military processes in their change and development.	219
Chapter X. The Methodological Function of the Basic Laws of Dialectics in Military-Scientific Cognition	229
1. The disclosure of contradictions, their development, and methods of resolution in the very essence of military processes. -	
2. The unity of quantitative and qualitative analyses in military-scientific cognition	242
3. Dialectical negation in military-scientific cognition, continuity in the development of military theory	256
Chapter XI. Categories of Dialectical Materialism as Reference Points of Military-Scientific Cognition	269
1. Content and form	-
2. The whole and the part	272
3. Essence and phenomenon	277
4. General, special, individual	281
5. Cause and effect	286
6. Necessity and chance	290
7. Possibility and reality	294
Chapter XII. The Relationship of Formal and Dialectical Logic in Military-Scientific Cognition	297
1. Formal logic and its relationship with dialectical logic	-
2. The laws of logical thinking and their role in military-scientific cognition	301

FOR OFFICIAL USE ONLY

SECTION V. FORMS AND METHODS OF DEVELOPMENT OF MILITARY-SCIENTIFIC KNOWLEDGE

Chapter XIII. Forms of Development of Military-Scientific Knowledge, Logical Sequence of the Research Process 312

1. Definition and formulation of a military-scientific problem ... -
2. Discovery of facts of military reality, their explanation and generalization 317
3. Formulation and substantiation of a military-scientific hypothesis 323
4. The construction of military theory and determination of ways for its practical realization 329

Chapter XIV. Employment of General Scientific Methods in Military Research 337

1. Observation and experiment -
2. Analysis and synthesis 341
3. Comparison and generalization, ascent from the abstract to the concrete 344
4. Historical and logical methods in military-scientific cognition 352
5. The method of expert estimates 358
6. Systems approach in studies 362

Chapter XV. Mathematical Methods in Military-Scientific Study 372

1. Most important fields for the employment of mathematical methods in military affairs -
2. Employment of probability theory in military affairs 375
3. Employment of queueing theory in military affairs 384
4. Employment of mathematical programming in military affairs 390
5. Employment of game theory in military affairs 394

Chapter XVI. Special Methods of Military-Scientific Study 398

1. Troop and experimental tactical exercises -
2. Command-post exercises 404
3. The solution of tactical quickie problems, the conduct of field trips (reconnaissance) 414
4. Range and troop tests 419

Conclusion 425

FOR OFFICIAL USE ONLY

INTRODUCTION

A characteristic feature of the contemporary era is the unprecedentedly swift development of science and its increasing influence on all aspects of the material and spiritual life of society. The role of science is especially growing under socialism. Its accelerated development is one of the chief factors in the successful accomplishment of tasks for communist construction. "...The scientific and technical revolution finds the direction which meets the interests of man and society only under the conditions of socialism," stresses L. I. Brezhnev in the summary report of the Central Committee CPSU to the 25th Party Congress. "In turn, the final tasks of the social revolution--the building of a communist society--can be accomplished only on the basis of the accelerated development of science and technology."*

Scientific and technical progress is also exerting decisive influence on all fields of military affairs, on all component elements of military art--strategy, operational art, and tactics, on military organizational development and measures conducted in the Armed Forces to maintain their high level of combat readiness, and on the methods for training and indoctrinating the troops.

In strengthening the military might of our motherland, the Communist Party is constantly guided by V. I. Lenin's instructions to the effect that a modern army cannot be built without science and that it is impossible to control troops and attain victory in modern war without reliance on military-scientific knowledge. The superiority of Soviet military science and military art was one of the most important conditions for the victory of the Soviet Armed Forces over fascism in the Great Patriotic War of 1941-1945.

The contemporary period of military organizational development is characterized by the heretofore unprecedented intensity of renewing the means of war, the appearance of qualitatively new types of weapons and equipment, and searches for those forms and methods of strategic, operational, and tactical actions which no army of the world ever employed. New methods for the conduct of military operations and new ways to improve the organizational structure of the Armed Forces, methods for their combat training, and to increase combat readiness

* "Materialy XXV s"yezda KPSS" [Materials of the 25th CPSU Congress], Moscow, 1976, p. 47.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

must be found and substantiated theoretically before becoming the property of military practice. All this led to a sharp increase in the role of military science which has become a most important factor in the combat might of the armed forces, while scientific control of the troops is the decisive condition for the attainment of victory.

The process of the continuous convergence of scientific and practical activity by military personnel is now occurring. The making of decisions for a battle or operation, the organization of the cooperation of the troops and their support, improvement of the forms and methods for field, air, and sea training of the personnel, and their ideological indoctrination and psychological training are more and more assuming the nature of scientific activity and requiring the application of research methods with necessary reliance on the latest achievements of science. Timely today as never before are the words of V. I. Lenin to the effect that "for us science has not remained a dead letter or a stylish phrase... so that science actually became part of our flesh and blood and was fully and genuinely transformed into a component element of our way of life."*

Pointing to the substantial changes in the nature of practical activity under the influence of scientific and technical progress, L. I. Brezhnev noted in the summary report of the Central Committee CPSU to the 25th Party Congress: "The revolution in science and technology requires basic changes in the style and methods of administrative activity, a decisive struggle against sluggishness and routinism, genuine respect for science, and the ability and desire to consult and take it into consideration."** This instruction also pertains completely to military activity. Without considering the achievements of contemporary military science, success of all types of practice in the combat and political training of the Armed Forces' personnel is now impossible.

The increase in the role of military science and intensification of its influence on all aspects of the practical activity of generals and officers are now occurring simultaneously with an acceleration in the rates of its development, the change in the content of military-scientific knowledge itself, and complication of the process of military-scientific cognition. Under these conditions, the question of increasing the effectiveness of military science arises with all urgency. It is called upon to provide the greatest results with the least expenditure of material resources and time and to solve the urgent problems of military affairs effectively.

A mandatory condition for the effectiveness of military science, obtaining results from military-scientific studies, and their rapid introduction into the practice of military organizational development is the further elaboration of the methodology for military-scientific cognition and, on this basis, the improvement of general and special methods for the solution of theoretical and practical problems of military organizational development.

* Lenin, V. I., "Polnoye sobraniye sochineniy" [Complete Works], Vol 45, p 391.

** "Materialy XXV s"yezda KPSS," p 48.

FOR OFFICIAL USE ONLY

War is a special object of cognition. Also specific are the conditions under which the development of military theory occurs and practical decisions are made. The content of contemporary military science also has a substantial influence on the process of military-scientific cognition and the research methods which are employed. Because of this, military-scientific cognition, theoretical as well as practical, is a specific form of scientific cognition which differs substantially from other types of cognitive activity. Therefore, the employment of the general propositions of Marxist-Leninist methodology in the development of military-scientific knowledge has its own peculiarities which are reflected in the content of the /methodology of military-scientific cognition/ [in boldface].

The effectiveness of military science is determined not only by the depth of elaboration of the methodology for military-scientific cognition, but also by the degree of its assimilation by military personnel. The latter is especially important since now not only are academies and scientific research institutions taking part in military-scientific studies, but also military districts, all operational and troop staffs, political organs, and virtually all generals and officers regardless of the posts which they occupy.

Knowledge of the methodology of military-scientific cognition and the general and special research methods is now another decisive factor for the successful practical activity of all commanders, staff officers, and political organs in controlling the troops in battle, organizing combat and political training in the units and subunits, and improving their combat readiness.

The Central Committee CPSU is constantly directing the leading scientific and military personnel toward the mastery of Marxist-Leninist methodology for the study of the phenomena of war, toward the creative solution of urgent problems in military affairs, and toward the improvement of the Armed Forces' combat capabilities.

The book which is offered to the reader discloses the special features in employing Marxist-Leninist methodology in the process of military-scientific cognition both in the development of military theory (theoretical military cognition) as well as in the commander's estimate of the combat situation, adoption of the decision for combat, organization of cooperation and combat support, and the maintenance of constant high combat readiness of subunits, units, and large units (practical military cognition).

The central place in the work is occupied by an analysis of the characteristic features in the study of the material and spiritual factors of war; the disclosure of the essence of military practice and its role in improving military theory, the relationship of the sensual and logical aspects of cognition, and empirical and theoretical knowledge; the disclosure of the logical function of the laws and categories of dialectics in military-scientific cognition and the content of the forms and methods for development of military-scientific knowledge; and criticism of the methodological bases of bourgeois military theories. Special attention was devoted to questions of the commander's

FOR OFFICIAL USE ONLY

creativity in a combat situation as the most important condition for the attainment of success in combat. The book contains specific recommendations for increasing the effectiveness of military-scientific studies and the solution of practical tasks by commanders, political organs, and staffs in the process of the combat and political training of the troops and their control in a battle and operation.

In writing the monograph, the authors relied on the classical works of Marxism-Leninism, the guidance documents of the CPSU, and the instructions of the Soviet Minister of Defense on combat and political training and military-scientific work in the Armed Forces. They utilized the experience of scientific studies which has been accumulated among the troops and in the military educational institutions. Use was also made of published works such as, for example, "Marksizm-leninizm o voyne i armii" [Marxism-Leninism on War and the Army] (five editions), "Metodologicheskiye problemy voyennoy teorii i praktiki" [Methodological Problems of Military Theory and Practice] (two editions), "Filosofskoye naslediyе V. I. Lenina i problemy sovremennoy voyny" [The Philosophical Heritage of V. I. Lenin and Problems of Contemporary War], "Marksistsko-leninskaya metodologiya voyennoy istorii" [Marxist-Leninist Methodology of Military History], and others in which questions on this subject are examined to one degree or another.

The book is intended for generals, admirals, and officers of the Armed Forces, students and cadets of military-educational institutions, and for all readers who are interested in the methodology of scientific cognition.

The group of authors expresses its sincere gratitude for valuable advice and assistance to Honored Scientist of the RSFSR, Doctor of Philosophical Sciences, and Professor I. D. Andreyev, Colonel General A. G. Shurupov, Admiral A. T. Chabanenko, Lieutenant General I. S. Shiyan, Lieutenant General V. F. Mernov, Doctor of Philosophical Sciences, Professor, Major General S. A. Tyushkevich, and Doctor of Philosophical Sciences, Colonel V. A. Zubarev.

SECTION I. THE ESSENCE OF THE METHODOLOGY OF MILITARY-SCIENTIFIC COGNITION

The Marxist-Leninist methodology of scientific cognition equips military personnel with an understanding of the essence, principles, and methods of cognitive activity and provides a scientifically substantiated approach to the study and solution of problems in military theory and practice. Its employment opens up the most expedient ways for military-scientific study and an analysis and evaluation of military events which have taken place. It helps to consider the effect of various factors on the course of combat operations and to disclose the reasons for victories and defeats in war.

The complex and dynamic nature of the development of contemporary military affairs does not tolerate a stereotyped, mechanical approach to the solution of theoretical and practical problems. Scientific methodology teaches us to see all phenomena in their development and continuous change and in an inseparable connection with specific conditions. It discloses the essence of

FOR OFFICIAL USE ONLY

creative thinking of military personnel, the capabilities and ways for scientific foresight of military events, and the relationship between the creative thought of people and computer technology which is used in military affairs.

The role of Marxist-Leninist methodology in the correct evaluation of bourgeois military science and disclosing its socio-political essence and reactionary role is great. To know the probable enemy means knowing not only his weapons, equipment, presumed methods for the initiation and conduct of war, strategy, and tactics, but also the methodological bases for the cognition and practical activity of his military personnel.

SECTION II. THE BASIC PROBLEM OF PHILOSOPHY AND MILITARY-SCIENTIFIC COGNITION

The basic problem of philosophy as an ideology and methodology of cognition is the problem of the relation of consciousness to being and of thought to matter. Its first aspect consists of determining which is primary--the spirit or nature, matter or consciousness. Materialistic philosophy recognizes matter and being as primary and, as secondary, consciousness as the result of the influence of the objectively existing external world on a subject. Idealism accepts as primary the idea and consciousness, considering them as the only reliable reality.

Following this, a materialistic solution of a basic problem of philosophy by Marxism-Leninism is the initial methodological precondition for explaining the material bases for the outbreak of war, the methods for its conduct, the objective nature of the regular laws for their development, and the disclosure of the relationship of material and spiritual as well as objective and subjective factors in the development of military theory, in the accomplishment of practical tasks of the combat and political training of the troops, and in making a decision in the course of combat operations.

The experience of military organizational development shows that realization of the methodological function for a materialistic solution of a basic problem in philosophy in military-scientific cognition is a task which is not only important but extremely complex. This is explained by the fact that in the processes of war the material and spiritual factors do not exist in isolation, in pure form, but are combined with each other in the most varied manner. Furthermore, the ties between them in military activity are extremely flexible and have many levels and aspects and they may be manifested differently depending on the specific circumstances. At the same time, only the consistent development of materialism in military-scientific cognition gives military personnel the capability not to permit subjectivism in the solution of theoretical and practical problems, in directing the training of the troops, and in controlling them in battle.

FOR OFFICIAL USE ONLY

SECTION III. THE DIALECTICAL PATH OF MILITARY-SCIENTIFIC COGNITION

The path to truth is complex and unique in its specific manifestation. The development of military theory and the improvement of cognitive capabilities of commanders and staff officers are also occurring in their special ways. Although many reasons, conditions, and circumstances lie at the basis of these processes, the main one is military practice. Practical military activity comprises the basis and main goal of military-scientific cognition, steps forth as the criterion of truth in scientific knowledge, and serves as a true index of its effectiveness. Therefore, it is necessary to begin the dialectical path of military-scientific cognition with a disclosure of the content of military practice and an explanation of its special features and the effect of various types on the development of military science, the improvement of military personnel's cognitive capabilities, and the molding of methods for troop control in peacetime and in battle.

The reflection of the real processes of war and the preparation of the country and the Armed Forces for it is the dialectical unity of sensual and rational cognition. On the basis of live contemplation, the commander obtains data on the external phenomena of battle, the combat situation, and the actions of the troops. Abstract thought provides the opportunity to disclose the essence of these heterogeneous processes and to establish the regular laws which form their basis. To make practical decisions, it is necessary to have knowledge of the regular laws of battle as well as of specific data on the situation which has actually developed in the course of it and the condition of friendly and enemy subunits. The special features of combat situations and the conditions in which the development of military theory occurs determine certain specific features of sensual cognition and abstract thought of military personnel.

The immediate goal of military-scientific cognition consists of obtaining objectively true knowledge which is necessary for the success of practical military activity. Truth itself is the dialectical unity of the absolute and the relative. The specific nature of military science as knowledge about future war, just as knowledge of a combat situation, determines a certain complexity in obtaining the objective truth and the special features of the relationship between relative and absolute elements in it.

The dialectical path of military-scientific cognition reflects not only the general regular laws of the cognitive process, but also the specific nature of their manifestation in the development of military knowledge. It is inherent to the cognitive activity of military personnel at all stages of the development of military affairs.

Under contemporary conditions, this process has become considerably more complicated and acquired new, specific features. The significance of theoretical thinking of military personnel has increased and the receipt of empirical material which predetermines the development of military-scientific knowledge has become more difficult. The revolution in military affairs caused the necessity for the development of fundamentally new theoretical views and

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

concepts, the truth of which it is difficult to check on the basis of peacetime military practice. All this required a further improvement in the criteria of truth in military theory. The explanation of the special features in the dialectics of development of contemporary military-scientific knowledge is a necessary condition for increasing the effectiveness of military-scientific studies and the adoption of well-grounded decisions in the course of practical military activity.

SECTION IV. THE METHODOLOGICAL FUNCTION OF DIALECTICS IN MILITARY-SCIENTIFIC COGNITION

Dialectical materialism is the teaching about the general tie and interconditionality of the phenomena of reality; the most complete and profound teaching of development which is devoid of bias; teaching about the relativity of human knowledge which gives us the reflection of perpetually developing matter; and the science of the universal laws of the movement and development of nature, human society, and thought. Neither a consistent materialistic understanding of nature and society, nor logic as a teaching about thought which grasps objective truth, nor a scientific theory of cognition are possible without dialectics. F. Engels called dialectics our best tool of labor. Under new historical conditions, V. I. Lenin characterized it as the "living soul" of Marxism.

Dialectics has universal, general significance, but its concrete manifestation depends on the specific nature of one or another field of objective reality. In pointing out the characteristic features of the dialectics and logic of "Capital" by K. Marx, V. I. Lenin stressed that "the dialectics of a bourgeois society is only a special case of dialectics for Marx."* When F. Engels wrote his notes on the dialectics of nature, he had in mind not the special dialectics of nature but namely the specific feature of the dialectics of development of natural processes. The special features in the manifestation of dialectics in one field or another of objective reality also determine the specific nature of its employment in the process of cognition.

The specific features of war also determine a number of peculiarities which characterize the dialectics of its ties and relations, functioning, and development. We can speak completely about the dialectics of war as a special case of dialectics. This specific nature of the dialectics of war also causes the special features of its cognition in a theoretical plane as well as in the course of accomplishing practical tasks.

Dialectical analysis of the processes of war always played an important role in the development of military-scientific knowledge but it is especially necessary now when old theories are collapsing under the influence of scientific and technical progress, a decisive reevaluation of items of importance is taking place, and a requirement for searches for new military-theoretical concepts is felt with special acuteness in military art. The successful

* Lenin, V. I., "Polnoye sobraniye sochineniy," Vol 29, p 318.

FOR OFFICIAL USE ONLY

accomplishment of these tasks is impossible without the mastery of dialectical materialism by military personnel and their ability to employ it in the accomplishment of theoretical and practical tasks.

The mastery of dialectical materialism by military personnel and development of the ability to employ it in the course of cognitive and practical military activity is a single, inseparably interconnected process. To think dialectically means thinking in accordance with the laws of objective reality. Such thinking can be developed in the process of cognition and practice by the trial and error method. The purpose of the conscious mastery of dialectics here also consists of reducing this path and forming the logic of the thinking process which permits avoiding errors in the accomplishment of theoretical and practical tasks.

The accomplishment of this task is especially necessary at military affairs' contemporary stage of development. This is determined by the increase in the interconnection of all aspects of war, the expansion of its interaction with all forms of society's life, and the rapid qualitative changes which are occurring in the development of the material and technical means of war. Under these conditions, only scientific dialectical thought provides the opportunity to become oriented in a situation quickly, to perceive what is new in good time, to discover trends in development, to foresee the course of forthcoming events, and to introduce the achievements of military science effectively into the practice of training the Armed Forces.

SECTION V. FORMS AND METHODS OF DEVELOPMENT OF MILITARY-SCIENTIFIC KNOWLEDGE

Science moves in a constant contradiction between an inexhaustible wealth of properties, ties, and relations of the object which it studies and the degree of their reproduction in the system of theoretical knowledge. At the contemporary stage of society's development, military science is one of the most mobile sciences. This feature is caused not only by the extreme variety of ties and relations of the military reality reflected in it, but also by the rapid rates of its development in connection with the dynamic reproduction of the material and technical means of war.

The development and improvement of military-scientific knowledge and military theory are accomplished in the course of scientific research activity of military personnel. The increase in the role of military science and military-theoretical knowledge with necessity requires an increase in the effectiveness of scientific investigations and the most rapid introduction of their results into the practice of the Armed Forces.

As regards its content, at the contemporary stage of development of military affairs military-scientific study is one of the most complex types of creative activity. Mandatory conditions for its success are a scientific world outlook, Marxist-Leninist methodology, creative ability, intuition, dialectical flexibility in the thinking of military personnel, and their profound knowledge of military science and the prospects for the development of military affairs.

FOR OFFICIAL USE ONLY

The development of science is a creative process, its enrichment with new knowledge which never arises suddenly or, what is more, in completed form. The receipt of new knowledge is not a simultaneous act. It is a complex process which has a certain logical sequence corresponding to the progressive nature of the development in the forms of scientific knowledge. In turn, each of them also has its own logic of development. The logic of scientific investigation is a logical sequence of research activity, the observance of which should ensure the most effective solution of a scientific problem.

The forms for the establishment of new knowledge are: scientific problem, scientific fact, hypothesis, and theory. Their creative development and enrichment also determine the logical sequence of the process for military-scientific study: definition and formulation of the military-scientific problem; discovery of the facts of military reality, their explanation and generalization; formulation and substantiation of a military-scientific hypothesis; construction of a military theory and determination of ways for its practical realization. The observance of this sequence attaches harmony and purposefulness to research activity.

Research activity requires the employment of not only the general dialectical-materialistic method, but also special general-scientific methods to obtain and accumulate empirical material, its theoretical generalization, and the use of special methods which are determined by the specific nature of military science's development.

Military personnel's knowledge of the logical sequence of research activity and the mastery of methods of scientific investigation are one of the most important prerequisites for the successful development of military science.

CONCLUSION

A considerable complication of the process of military-scientific cognition and the development and improvement of military theory is presently taking place. Military theory as the basis of possible combat activity can fulfill its predestination if it reflects correctly the objective regular laws of war and discloses the trends in the development of military affairs. Objective knowledge of military processes in the course of military operations is also a most important prerequisite for the commander's adoption of optimum decisions.

The acceleration of rates of development of military-scientific knowledge, the increase in the significance of the solution of basic and applied problems of military science, and the specific nature of the correlation between military theory and practice with necessity require not only further improvement of the traditional methods of military-scientific research, but also the development of new ones whose employment would provide the opportunity to achieve the greatest results with the least expenditures of men, equipment, and time. Success in the accomplishment of this task depends greatly on the methodological arsenal of the military personnel.

FOR OFFICIAL USE ONLY

Analysis of the methodology of military-scientific cognition and its significance in the development of military scientific knowledge shows the necessity for a further elaboration of methodological problems in military science on the basis of the contemporary achievements of Marxist-Leninist philosophy and the level of military-scientific knowledge with consideration of the specific nature of their improvement.

The study conducted by the authors provided the opportunity not only to set forth the content of the bases of methodology for military-scientific cognition, but also to disclose those problems the solution of which will contribute to an increase in the effectiveness of the cognitive activity of generals and officers.

The problems which were put forward by the investigators in the course of solving various scientific tasks are not something external in relation to the work which they accomplished. The value of an investigative work is determined not only by the problems which are solved in it, but also by the degree to which it directs scientific investigation toward the solution of new problems. The party teaches us constantly to see unresolved problems and to concentrate our attention on their disclosure and elaboration.

The increase in the significance of research activity by military personnel and its continuous complication require a comprehensive analysis of the process of military-scientific research in its complete form--from the definition of the scientific problem to the introduction of the results of its solution into the practice of the troops' combat training and the increase in their combat readiness.

Great experience in scientific research work has now been accumulated. Therefore, an urgent necessity exists for its generalization and propagation. The successful accomplishment of this task will be furthered by the elaboration of special methodological problems in scientific research which reflect the special features of the contemporary stage of military-scientific knowledge.

The conversion of military science into a basic science signifies that one of the most important directions in military-scientific study is the analysis of the basic laws of war, disclosure of their mechanism for operation, and the revealing of the forms for their manifestation in various types of contemporary wars. For this, there is a requirement for the thorough working out of such methodological problems as the correlation of the objective laws of war and the laws of military science, the essence of the mechanism for the operation of a law, the effect of the requirements of the objective laws of war on the practical activity of the Armed Forces, and so forth.

The combination of the basic and applied levels of knowledge in the content of military science engenders a number of new methodological problems such as establishing the difference in the methods for obtaining them and the direction of theoretical knowledge's influence on applied elaborations.

FOR OFFICIAL USE ONLY

The increase in the significance of foresight in the development of armaments and the methods of waging war is causing the necessity for a further improvement in the methods for forecasting, the disclosure of the correlation of quantitative and qualitative analysis in the forecasting process, and the establishment of capabilities to forecast the future.

The degree of effectiveness of military-scientific studies depends greatly on the creative capabilities of the research personnel. Consequently, the clarification of the mechanism for creative scientific activity and ways for the molding of the creative thought of generals and officers is one of the most important methodological problems requiring solution.

The control of troops in battle requires that commanders and staff officers have specific cognitive capabilities. This circumstance determines the necessity for the working out of two inseparably interconnected methodological problems: the thinking logic of the commander in the course of making an estimate of the situation and making a decision; and the psychology of the thinking process in a dangerous and suddenly changing situation.

The elaboration of a methodology of military-scientific cognition may have a substantial effect on increasing the effectiveness of research activity only in the case where military personnel are mastering it. It should be said that considerable work has been accomplished in this direction, especially recently. More works on various problems in the logic and methodology of military-scientific cognition have begun to be published on the pages of our military press.

It would be desirable to devote more attention to this question. This pertains especially to the necessity for publishing works on increasing the effectiveness of military science and the results of military-scientific studies, and to the broad exchange of work experience in this direction. The study of the logic and methodology of scientific cognition and the methods for the accomplishment of research tasks must become a component part of higher military education.

The improvement of the system for training and indoctrinating military personnel is now being accomplished in the direction of strengthening the research and creative element and excluding the molding of stereotyped, unoriginal thinking. Training is not only and not so much the memorizing of ready knowledge as it is an independent approach to the assimilation of the material being studied. Training is, first of all, the molding of creative thought on the basis of knowledge which has been obtained. To teach means to give knowledge and to develop the trainees ability for its improvement as well as to shape the investigator's skills.

The socialist nature of our system and the Armed Forces, the leading role of the CPSU, a dialectical-materialistic world outlook, and a scientific

FOR OFFICIAL USE ONLY

methodology are creating all necessary preconditions for the successful accomplishment of tasks in military-scientific cognition and for increasing the effectiveness of military science as well as the quality of military-scientific studies.

COPYRIGHT: Voenizdat, 1977

6367
CSO: 1801

28

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

BOOK DESCRIBES ARMY OPERATIONS IN GREAT PATRIOTIC WAR

Moscow ARMEYSKIYE OPERATSII in Russian 1977, pp 1, 2, 255, 253-254, 3-5, 252

[Book edited by Army Gen A. I. Radziyevskiy]

[Excerpts] Title Page:

Title: ARMEYSKIYE OPERATSII (Army Operations. Examples from the Experience of the Great Patriotic War)

Author: Army General A. I. Radziyevskiy, editor

Publisher: Voennoye izdatel'stvo Ministerstva Oborony SSSR

Place and year of publication: Moscow 1977

Signed to Press Date: 22 August 1977

Number of Copies Published: 20,000

Number of Pages: 255

Information on Authors:

Authors: Lieutenant General D. K. Slepenkov; Colonels: V. V. Chervonobab, G. I. Garbuz, B. A. Kiselev, N. N. Loginov, Ye. A. Bryuzgin, V. I. Levykh, Yu. V. Usovich, M. G. Gushchin, Z. Ye. Gudym, I. I. Pivovarov, V. G. Antipin, A. M. Sazanov, F. D. Sverdlov, Ye. A. Brynskikh, R. M. Portugal'skiy, B. P. Frolov, Ye. P. Milenin, A. M. Suprunenko, V. S. Kirilenko [deceased], F. F. Lopatin, G. V. Luzgin, A. A. Romanov, V. P. Khrabrov, V. I. Starostin, V. I. Chernousov; Captain 1st Rank V. I. Pchelkin; Lieutenant Colonels: P. P. Ivanov, V. I. Abaturov, A. A. Popov, N. M. Romanichev.

Annotation

The book presents the most instructive examples which disclose the combat composition, operational formation, selection of the direction for the main effort, employment of the combat arms, support of combat operations, and other important questions concerning offensive operations of combined-arms armies.

FOR OFFICIAL USE ONLY

Examples of defensive operations are used to examine their duration, methods for assuming the defensive, structure of the defense, organization of anti-tank defense, maneuver, and other elements of the preparation and conduct of operations.

The book is intended for officers and generals as well as for students and cadets in higher military educational institutions.

TABLE OF CONTENTS

	Page
FOREWORD	3
Chapter 1.	
OFFENSIVE OPERATION	6
1. Combat composition of the combined-arms army	7
2. Scope of army offensive operations	9
3. Work methods of the army commander and staff when making the decision for an operation and assigning missions to the troops	11
4. Selection of the direction for the main effort and the massing of men and equipment	16
5. Organization of cooperation and control	23
6. Operational formation of the army	30
7. Planning the employment of the combat arms and aviation in the offensive	33
8. Preparation of the departure area for the attack and the procedure for its occupation by the troops	45
9. Breakthrough of the enemy's prepared defense	49
10. Commitment and combat of the second echelons and the army mobile groups	61
11. Repelling enemy counterattacks	71
12. Completion of the enemy's destruction by the 13th Army in the course of the Chernigovsko-Pripyat' operation of 26 August - 30 September 1943	79
13. Pursuit of the enemy	83
14. Meeting engagement	89
15. Assault crossing of water obstacles	93
16. Forward detachments in offensive operations	98
17. Employment of airborne assaults	103
18. Sea assault landing operations	105
19. Combat operations at night	111
20. The capture of large cities	116
21. Attack in the mountains	122
22. Attack along a seacoast	135
23. Employment of smoke. Some problems in operational camouflage and concealment	139

FOR OFFICIAL USE ONLY

Chapter 2

DEFENSIVE OPERATION	154
24. Combat composition of the army and indicators of a defensive operation	156
25. Assumption of the defense by the combined-arms army	159
26. Structure of the army's defense	166
27. Organization of the antitank defense	170
28. Massing of men and equipment on direction of expected enemy blows in army defensive operations	173
29. Fighting the enemy on the approaches to the defense	176
30. Conduct of the counterpreparation	178
31. Strike of enemy troops in front of the forward edge of the battle area [FEBA]	181
32. Fighting for the main (first) defensive zone	184
33. Maneuver of men and equipment in the tactical depth of the defense	188
34. Shifting the main effort to a new direction in the course of an operation	193
35. Launching counterattacks	197
36. Army combat operations in encirclement and on breaking out of encirclement	204
37. Defense of a large city	213
38. Defense of water obstacles	221
39. Defense in the mountains	224
40. Defense in the Polar Region	228

Chapter 3

REDEPLOYMENT OF FORCES	236
41. Redeployment of the 28th Army from the Brest region to the Mariampol' region	-
42. Redeployment of the 56th Army in preparing the Berlin operation	240
43. Redeployment of the 28th Army in the Zagan area	244
44. Redeployment of the 8th Army of the Leningrad Front from Oranienbaum to Leningrad	247

FOR OFFICIAL USE ONLY

FOREWORD

The exploit of the Soviet people in the Great Patriotic War is immortal. It lives and will live forever in the grateful memory of the peoples who were saved from the brown plague of fascism.

The Soviet people, who lost more than 20 million lives of their citizens in the struggle against fascism, know what war is and the innumerable disasters which it brings to people. Nor can our people forget that after the end of World War II the fires of war repeatedly blazed in Asia, in Africa, in the Near East, and in Latin America. The party and the Soviet government constantly remember this and are steadily implementing the behests of V. I. Lenin concerning the strengthening of the combat might of our motherland's Armed Forces. "No one should have any doubt," the General Secretary of the Central Committee CPSU, Comrade L. I. Brezhnev, pointed out at the 25th Congress of the CPSU, "that our party will do everything so that henceforth, too, the glorious Armed Forces of the Soviet Union will have all the necessary means for the accomplishment of their important mission--to be the guardian of the Soviet people's peaceful labor and the bulwark of universal peace."*

In the years of World War II, the armies of the warring states received considerable experience in the conduct of operations, campaigns, and the war as a whole. Especially great experience was accumulated in the years of the Great Patriotic War by the Soviet Armed Forces which conducted their operations under the most varied conditions. Many of the operations which were conducted became classics of military art and, despite the fact that more than 30 years have passed since the end of the war and military art has marched far forward, the experience of World War II even now is one of the most important sources for elaborating contemporary military theory and for training military personnel. This experience must be used; one must learn to delve into the depth of the phenomena which occur in military affairs and make bolder use of the conclusions of science in his activity. In order to employ the experience of the Great Patriotic War in the accomplishment of practical tasks now, it is necessary to make an especially attentive and careful selection

* Brezhnev, L. I. "Otchet Tsentral'nogo Komiteta KPSS i ocherednyye zadachi partii v oblasti vnutrenney i vneshney politiki" [Report of the Central Committee CPSU and the Immediate Tasks of the Party in the Field of Domestic and Foreign Policy]. Moscow, Politizdat, 1976, p 100.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

of what has not lost specific value for the military art of our time and permits us to extract lessons for the future.

Our victory is natural because the actions of the Armed Forces under the leadership of the party were supported by the entire economic might of the Soviet state. It was a victory of the Soviet economic system as a whole and the war economy in particular. The Soviet system provided the best forms for organizing the economy not only for the accomplishment of national economic tasks in peacetime, but also for the mobilization of all the economic capabilities of the country in the period of war. Overcoming the colossal difficulties of the war years, the Soviet economy supplied the front with everything necessary for victory--weapons and ammunition, food and uniforms.

During the years of the Great Patriotic War, Soviet industry produced 137,000 airplanes, 104,000 tanks and self-propelled artillery mounts, and 488,000 guns --more of these types of weapons and combat equipment than was produced in fascist Germany.*

The Soviet economy not only made up the combat losses in equipment and weapons, but it also steadily increased the rates of output of military production. It was primarily this which ensured the success in the operations of the Soviet Army in the years of the Great Patriotic War.

In our time, when the constant efforts of the Communist Party and the Soviet state are directed toward the strengthening of peace, toward curbing the arms race, and toward strengthening positions of socialism and of all forces which are stepping forth for the freedom of peoples and social progress and for the mutually advantageous collaboration of all states, we should not forget, as was pointed out by member of the Politburo of the Central Committee CPSU and Minister of Defense of the USSR, Marshal of the Soviet Union D. F. Ustinov, in his congratulations to the Military Academy imeni M. V. Frunze in connection with the graduation of its students, that the reactionary circles of the capitalist countries are trying to discredit the policy of peaceful coexistence, are continuing the arms race, and are interfering in the internal affairs of other peoples. This obliges the socialist countries to keep their armed forces in constant combat readiness.

The goal of the work, "Armeyskiye operatsii," is to show by means of specific examples what is most instructive in the organization and conduct of army operations in the last war.

The first chapter of the work presents examples from the offensive operations of the armies which operated in the direction of front main efforts. As a rule, these armies had a considerably greater reinforcement by artillery and especially by tank and mechanized large units. The preparation of offensive operations discloses the content, procedure, and work methods of army commanders

* See: "Istoriya Kommunisticheskoy partii Sovetskogo Soyuza" [History of the Communist Party of the Soviet Union]. Vol 5, book 1, p 644.

FOR OFFICIAL USE ONLY

and their staffs and the chiefs of the combat arms and special troops in the matter of organizing the cooperation of the combat arms. The art of organizing control and cooperation is shown primarily in its rigid centralization which is combined with the initiative and creativity of subordinate commanders and staffs, concrete definition of missions, their persistent accomplishment, and bringing the direct leadership of the army commander (commander) and chiefs at all echelons as well as their staffs closer to the troops.

The second chapter sets forth in detail the defense of our troops under various conditions against superior enemy tank and motorized infantry forces. Its basis was the fire of artillery and tanks in combination with engineer obstacles, the stubborn retention of occupied positions, and the broad maneuver of men and equipment to threatened directions. Enemy tanks were the most dangerous targets on the battlefield. The difficulty in combating them, self-propelled artillery, infantry combat vehicles, armored personnel carriers, and other armored targets is increasing immeasurably under contemporary conditions. Combating enemy armored objects will be difficult and strained and will be one of the most important missions of the troops in a battle and operation. All large units and units of the Soviet Army must be ready for it.

The third chapter is devoted to the redeployment of troops.

Concluding Paragraph

By now, decades are separating us from that historic day of 8 May 1945 when, in the Berlin suburb of Karlshorst, representatives of the German high command signed the act of unconditional surrender of fascist Germany's armed forces. During this time, tremendous socio-political and economic shifts occurred in the world which changed the disposition of forces in the international arena in a fundamental manner. Postwar scientific and technical progress changed the face of the armed forces of the world's main states. The changes in the means for the conduct of war entailed just as considerable changes in the organization of armed forces and in the methods and forms for the conduct of armed conflict. At the same time, contemporary military art cannot develop without considering the experience of the last war. The contemporary propositions of Soviet military science in the field of the armed forces' organizational development, the development of military theory, and the training and indoctrination of the troops depend to a considerable degree on the richest historic experience. The combat experience which was acquired by the Soviet Armed Forces in World War II is the inestimable wealth of our people. Its profound study will contribute to the development of the military horizon of the Soviet Army's officers and generals.

COPYRIGHT: Voenizdat, 1977

6367
CSO: 1801

END

34
FOR OFFICIAL USE ONLY